

1) Family number: 64890468 (US2018227043 AA)

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Title: FLEXIBLE CAPACITY SATELLITE CONSTELLATION

Abstract: Embodiments provide in-flight configuration of satellite pathways to flexibly service terra-link and cross-link traffic in a constellation of non-processed satellites, for example, to facilitate flexible forward-channel and return-channel capacity in a satellite communications system. For example, each satellite in the constellation can include one or more dynamically configurable pathway, and switching and/or beamforming can be used to configure each pathway to be a forward-channel pathway or a return-channel pathway in each of a number of timeslots according to a pathway configuration schedule. At least some of the pathways can be further selectively configured, in each timeslot, to carry "terra-link" traffic to and/or from terrestrial terminals and "cross-link" traffic to and/or from one or more other satellites of the constellation.

Classifications:

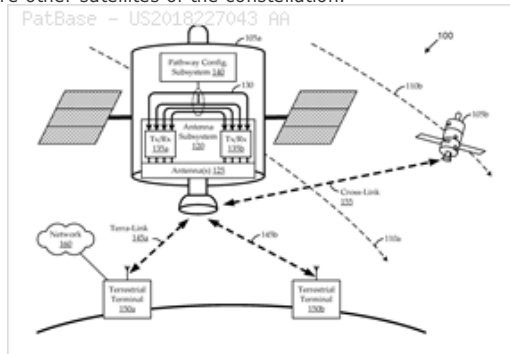
International (IPC 8-9): H01Q1/28 H04B H04B7/155 H04B7/185 H04B7/204 H04H60/06

International (IPC 1-7): H04B7/185 H04B7/204

CPC: H01Q1/288 H04B7/18513 H04B7/18515 H04B7/2041

H04B7/2046 H04B7/18521

US: 1/1 455/3.03



Family:

Publication number	Publication date	Application number	Application date
AU2016302616 AA	20180208	AU20160302616	20160726
AU2016302616 BB	20200625	AU20160302616	20160726
BR112018001923 A2	20180925	BR20181101923	20160726
CA2993639 AA	20180124	CA20162993639	20160726
CL2018000261 A1	20180525	CL20180000261	20180130
CL2020000771 A1	20201002	CL20200000771	20200325
CN108337923 A	20180727	CN201680053980	20160726
CO20180001231 A2	20180430	CO20180001231	20180206
CR20180125 A	20180514	CR20180000125	20160726
EP3329612 A1	20180606	EP20160747963	20160726
ID201808329 A	20180803	ID2018PID01308	20160726
IL256983 A0	20180329	IL20160256983	20160726
IN201817005823 A	20180615	IN201817005823	20180215
JP2018528659 T2	20180927	JP20180504254T	20160726
KR20180034593 A	20180404	KR20187005689	20160726
MX2018001319 A1	20180824	MX20180001319	20160726
PE06492018 A1	20180417	PE20180000164	20160726
PE20180649 A1	20180417	PE20180000164	20160726
PE20186492 A1	20180417	PE20180000164	20160726
PH2018500192 A	20180730	PH20180500192	20180125
RU2018105130 A	20190829	RU20180105130	20160726
RU2018105130 A3	20200205	RU20180105130	20160726
RU2727185 C2	20200721	RU20180105130	20160726
SG10201912685S A1	20200227	SG20191012685	20160726
SV2018005623 A	20180411	SV20180005623	20180130
US10707952 BB	20200707	US20160748139	20160726
US2018227043 AA	20180809	US20160748139	20160726
US2020295822 AA	20200917	US20200885892	20200528
WO17023621 A1	20170209	WO2016US44081	20160726

Priority:

US20150199800P 20150731 WO2016US44081 20160726 RU20180105130 20160726
US20160748139 20160726 US20180748139 20180126 US20200885892 20200528

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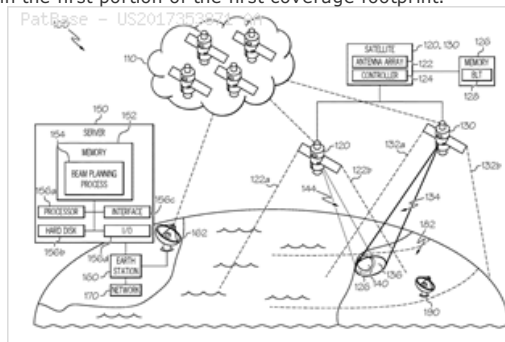
Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN

2) Family number: 67746537 (US2017353871 AA)

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Title: INTERFERENCE MITIGATION FOR A SATELLITE NETWORK

Abstract: In one implementation, interference generated by a constellation of satellites is mitigated. Each satellite is configured to provide multiple beams that define a coverage footprint. Anticipated positions are determined for satellites. Based on the anticipated positions, a determination is made that, during a defined period of time, portions of a coverage footprint for a first satellite will be covered by coverage footprints for other satellites. Based on this, a beam assignment for the first satellite is defined in which a first subset of beams configured to provide coverage of a first portion of the first coverage footprint are inactive, and a beam assignment for a second satellite is defined in which a second subset of beams are active, where the second subset of beams provide coverage within the first portion of the first coverage footprint.

Classifications:**International (IPC 8-9):** H04B15/00 H04B7/185 H04W16/28
H04W28/08 H04W84/06**CPC:** H04B15/00 H04B7/18513 H04B7/195 H04W16/28 H04W28/08
H04W84/06**US:** 1/1 370/235 455/12.1**Family:**

Publication number	Publication date	Application number	Application date
US10244407 BB	20190326	US20170616012	20170607
US2017353889 AA	20171207	US20170616012	20170607
US10149200 BB	20181204	US20170616020	20170607
US2017353871 AA	20171207	US20170616020	20170607
US10582422 BB	20200303	US20180207489	20181203
US2019182709 AA	20190613	US20180207489	20181203
US10257716 BB	20190409	US20180970981	20180504
US2018255467 AA	20180906	US20180970981	20180504
US10631206 BB	20200421	US20190293941	20190306
US2019342794 AA	20191107	US20190293941	20190306
US2020322844 AA	20201008	US20200850887	20200416

Priority:

US20160347076P	20160607	US20170616020	20170607	US20170616012	20170607
US20180970981	20180504	US20180207489	20181203	US20190293941	20190306
US20200850887	20200416				

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